

Risk Control Bulletin

Getting Material Off The Floor It's an Efficiency Issues

RISK CONTROL



When you are walking through your operations, whether it is manufacturing, assembly, warehouse, or construction, observe your employees bending to pick up material or products off the ground or floor. You see the employees bending, but have you really observed their bending?

We call this the “Forest from the Trees Syndrome” as we go about our daily business observing employees bending in the work environment, yet we do not really see the bending because we have come to accept this behavior for the past thirty years and it is not seen as an efficiency or musculoskeletal disorder risk factor issue.

There is an exercise that you can do that will dramatically put this into perspective. Take a notebook pad and go through your operations and write down everything – yes everything – that is on the floor or ground. Include every department and area in your operations, there is no area that is exempt from this exercise. You will be surprised and even shocked at the amount of material, tools, product, etc., that is actually on the floor or ground.

The Numbers

The average employee who bends 100 times a day and works 250 days a year will bend 25,000 times a year. It is very important to understand the number of times an employee bends and all foremen, supervisors and managers should be aware of this number.

In the Harvard Business Review, May 2004 “Learning to Lead at Toyota” it was noted that the first lesson a manager learns is there is no substitute for direct observations. Direct observation is essential and no combination of indirect method, however clever, can possibly take its place.

It is essential that we understand with accuracy the number of times an employee bends in a day. Observe the typical job task as it should be completed, count the num-

ber of times the employee bends in a day, and then extrapolate it for the year. This annualized number is very important as most managers see only one bend, but they do not think about how this projects out over a year.

It takes direct observation to really understand and see the bending that is occurring in the work place. Bending, lifting, lowering, and carrying is an efficiency issue as well as having musculoskeletal disorders (MSD) risk factors associated with it.

Most operations managers do not see bending as an efficiency issue. It takes approximately two to three seconds to bend, so if you are bending 25,000 times a year it is taking approximately twenty-one hours a year to complete this bending, so if you have 100 employees this is over 2,100 hours a year of just bending.

The Percentages

We understand that all material, products, and tools cannot be off of the floor or ground. However, what percentage of this material and products could be raised off the floor, reducing or eliminating the bending? Can you get five, ten, or twenty percent of the material off the floor?

These small changes can make a large difference when they are annualized over several years, so you do not have to change one hundred percent of the operation. Make small changes that can affect your operations quickly.

Solutions

You do not have to spend tens of thousands of dollars to get materials off the floor or ground. Three or four pallets can be strapped together as a base with the pallet of material then placed on top, raising it up off the ground or floor and placing the employee in more neutral posture, reducing the bending to the floor to pick up material.



In addition, materials can be placed on tables or saw-horses, forklifts can raise material up to waist height, a hoist can be used to lift material and position it to be worked on. Lift tables, spring activated tables, and hydraulic lift tables can be used to keep the material and products between knuckle and shoulder height.

There are many ways to raise material off the ground and floor. We have to see our operations through different glasses, identify those opportunities that present themselves in the work place and make the changes to raise the materials off the floor. Remember, having material on the floor or ground is an efficiency issue, along with the risk factors associated with bending to the floor. By making changes of this nature can affect your bottom line profit and reduce injuries at the same time.